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| (30) Priority:                        | <b>14.01.93 JP 05 5083</b> | (71) Applicant: <b>MATSUSHITA ELECTRIC LTD</b>      |
| (43) Date of application publication: | <b>09.05.95</b>            | (72) Inventor: <b>YUGAWA KAZUHIKO KAWAMOTO YOJI</b> |
| (84) Designated contracting states:   |                            | (74) Representative:                                |

**(54) MOTOR-DRIVEN TOOTHBRUSH**

(57) Abstract:

**PURPOSE:** To widen the application area to improve the effect by enabling the reciprocal linear movement in the axial direction of stem part, reciprocal movement around an axis and reciprocal movement around the axis in the protruding direction of brush part.

**CONSTITUTION:** When a rotary body 1 is rotated clockwise even a reciprocal cam part 21 is turned into an eccentric state with respect to an axial hole 12 and an inclination face 25 of a rotary cam 22 is brought into a second follower part 32 of a cam follower 3. In association with the rotation of a cam 2, the cam follower 3 performs reciprocal linear movement in the axial direction of an output shaft 30 and simultaneously performs reciprocal rotation movement within a range corresponding to the inclination of the face 25 in the axial direction. The

reciprocal linear movement of the cam follower in the axial direction is turned to the reciprocal sliding operation of a slider 52 and with the rack and pinion engagement in the turning table 55 and a holder 51 it turns to the reciprocal rotation of the table 55.

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